

A photograph of the Houston skyline, featuring several prominent skyscrapers like the Bank of America Tower and the JP Morgan Chase Tower. In the foreground, there is a green grassy field and a highway overpass. The sky is blue with some light clouds.

From Response to Recovery to Resilience: Hurricane Harvey Update

JANUARY 18, 2018

This disaster was unprecedented; so will be the recovery effort

Hurricane Harvey is the worst rainfall disaster in US history

Harvey is a 1,000-year flood event unprecedented in scale

Harvey is one of the costliest disasters in U.S. history, and most of the victims have no flood insurance

- Major News Outlets, Aug 2017



Historic flooding: 2.6K miles of City roads under water



Homes hit hard: >311,000 households impacted

We're building forward, not just building back

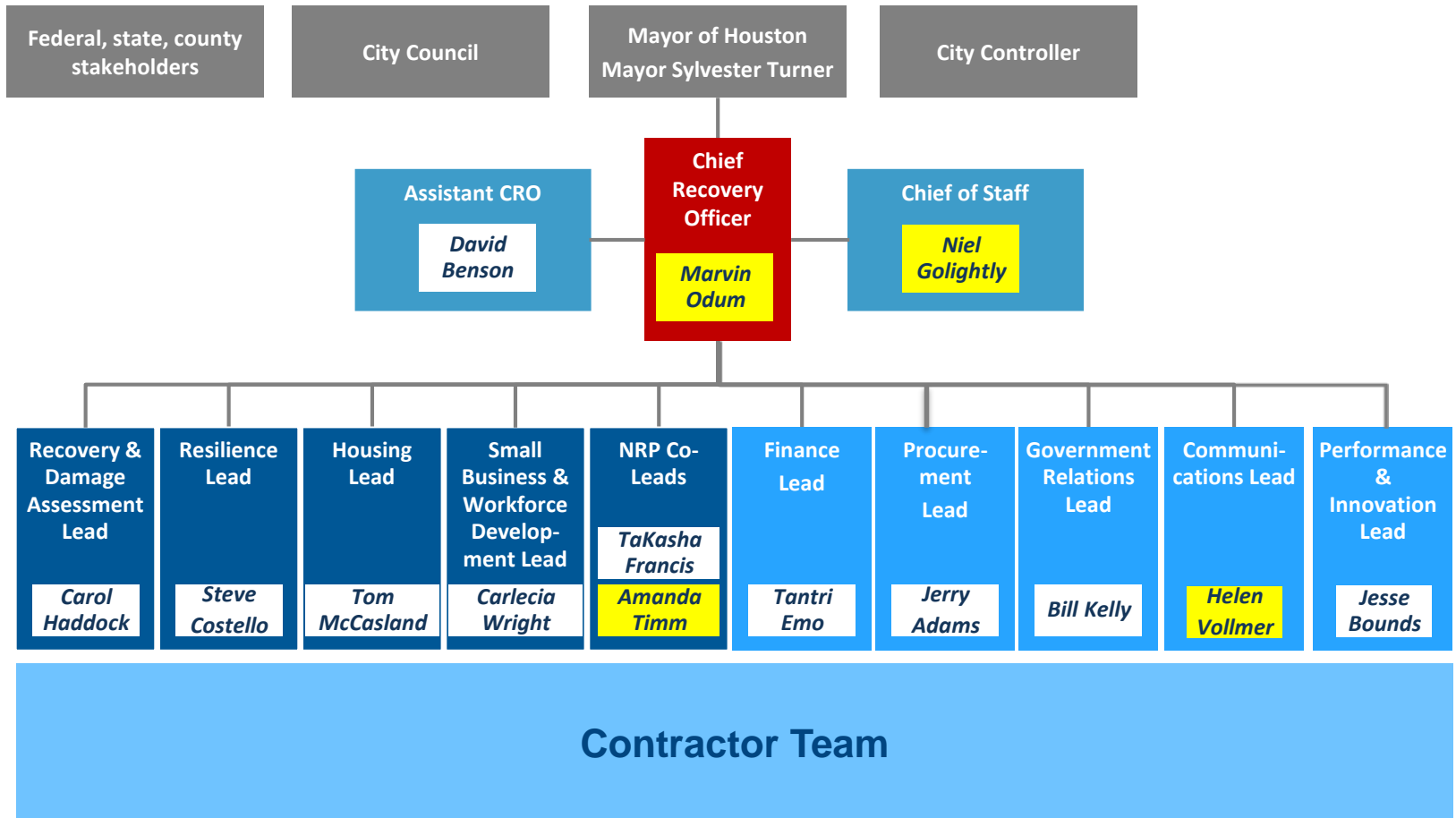
The mission of the recovery effort is to secure and deploy disaster resources to...

- accelerate Houston's recovery,
- strengthen Houston resilience, and
- enhance the quality of life and economic vitality of Houston and its people.

*"This is a defining moment for the city of Houston. **It's not enough for us just to rebuild** in the same way, in the same place. If we do that, then we will miss the mark and quite frankly we will miss the opportunity this storm has afforded us."*

-- Mayor Turner

We've assembled a team geared to managing a multi-billion dollar recovery

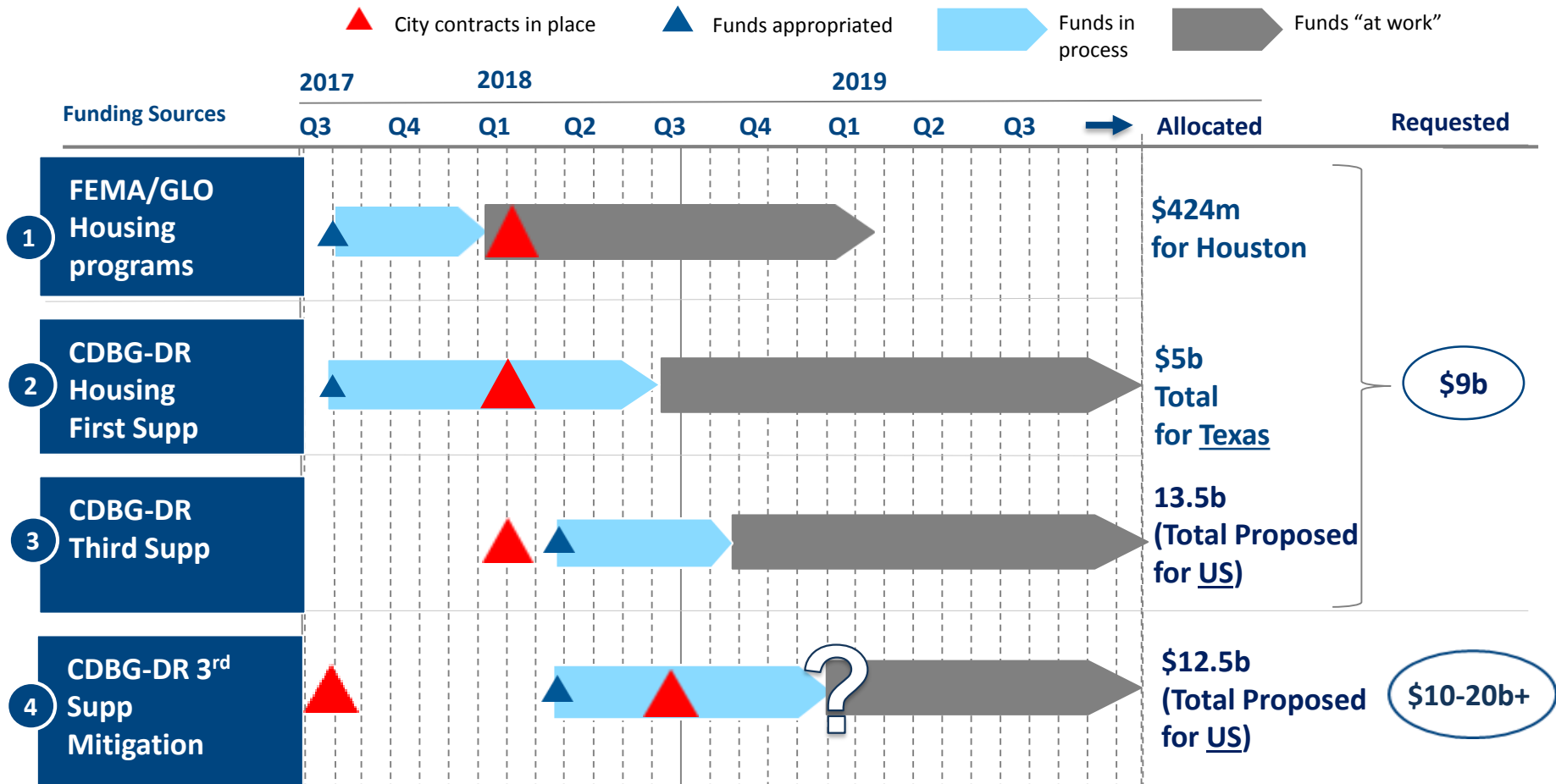


Moving on multiple fronts



Recovery spending plan:

Funding *uncertainty* drives planning *complexity*



Note: These are the sources of recovery funding managed by the City of Houston. These need to be coordinated and aligned with housing, resilience and flood mitigation projects managed by the Army Corps of Engineers, Harris County Flood Control District, other regional jurisdictions, private foundations and commercial capital.

Multiple strategies for securing, stretching, deploying resources



Scale & Choices

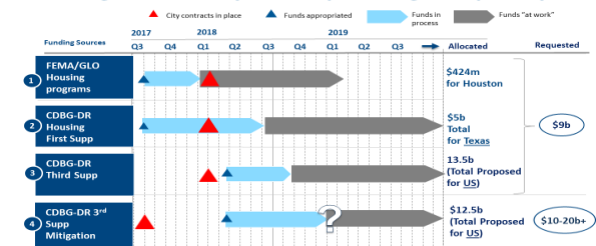
- **Funding need is massive:** “Fair share” of federal DR funds critical (TX state advocacy to fund for success)
- Even then, **there will not be enough money** for everything – need to make hard choices in face of high uncertainty (policy matrix, planning for range of outcomes)
- **Blending spending priorities with policy choices.** Flood Plain designation, buyouts, building codes, resilience planning to protect homes, businesses and city assets.
- Seeking and deploying **innovative technologies** to enhance modeling, mitigation, early warning, etc.

Who receives funding?	Where does the funding come from?	What are the recovery activities where funds could be used?	Application timing?
Individual Homeowners	FEMA: Individuals & Household Program (IHP)	Disaster housing assistance (IHA), other essential needs (IHA), gaps in insurance coverage	60 days
	MPF	Physical repair costs for flood damage	60 days (adjusted)
	Private Insurance	Property damage, temporary living assistance, essential needs	
	US Dept. of Labor	Unemployment assistance	
City of Houston local communities	USDA	Flood damage, food vouchers	
	Health & Human Services	Disaster responses, food assistance, health, housing, child care, including social services facilities, etc.	
	HAUP: CDBG-DR	Supplemental funds used for home reconstruction, rehabilitation, acquisition, infrastructure development	Project based
	FEMA: Hazard Mitigation Grant Program (HMGP)	Strengthening buildings, elevation of flood-prone structures, acquisition of high hazard properties, conversion to use to open space	Project based
Small business owners	State: Econ. Stim. Fund	Rainy day fund with flexible use	
	FEMA: Public Assistance grants (PA)	Restore a disaster-damaged facility to pre-disaster design, function and capacity (areas include roads, bridges, parks, water control facilities, schools, hospitals, libraries, etc. (not included in other Federal aid grants))	30 days from disaster 60 days after ICM
	FEMA: Hazard Mitigation Grant Program (HMGP)	Emergency work (dike removal, emergency repair & demolition, shoring)	Project based
	HAUP: CDBG-DR	Supplemental funds used for public infrastructure projects, building of public facilities, administrative costs, and other public infrastructure projects using funds allocated by FEMA/HAUP	Project based
	US Army Corp. Eng'r	Repair of Federal highways (FHWA) & transit systems (FTA)	
	US DOT	Repair of Federal highways (FHWA) & transit systems (FTA)	
	State: Econ. Stim. Fund	Rainy day fund with flexible use	
	EPA	Low interest loans to fund repair and rebuilding of water systems	
	SBA	Disaster loans for “physical losses” as well as “economic losses”	Priority: 10/20/17 Economic: 06/20/18
	USDA	Loans from the Farm Service Agency (FSA) for agricultural losses	

Negotiation & Compliance

- **Damage Assessment ongoing:** Conducting detailed inspections with FEMA
- Critical to ensure **reimbursement requirements** are met (via MPM performance, procurement process)
- **Working with FEMA on intelligent strategies for resilience, versus simple repairs (25% of projects)**
- Collaborating with county and state on **major infrastructure projects** (Reservoir, bayou projects, Lake Conroe & SJRA, Coastal Spine, infrastructure consolidation, etc)

Recovery spending plan: Funding uncertainty drives planning complexity



Cash flow & Timing

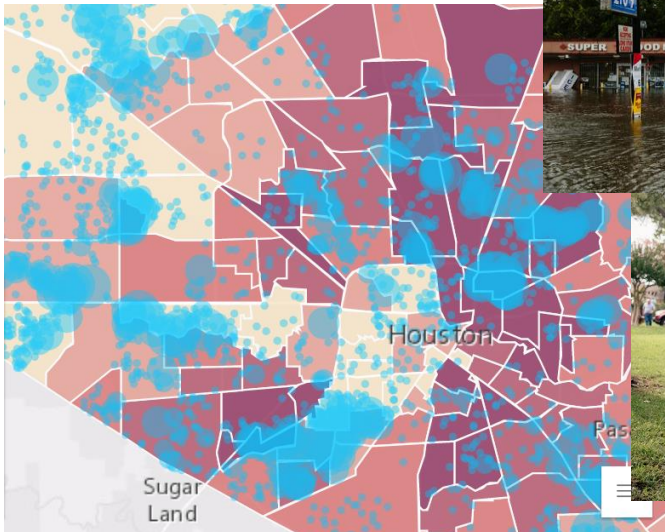
- **Matching funding inflows and outflows** will be a challenge (request for revolving loan from State)
- Goal to ensure **hammers swinging** as soon as money arrives (contracts and policy choices in place in timely fashion)
- Working with GLO, FEMA and HUD to **accelerate arrival of funds** (Direct allocation and/or MOD)

Neighborhood Resilience Program to accelerate recovery and strengthen resilience by providing...

More, Better, Faster
Recovery Services for
impacted Houstonians

Stronger, Safer, Smarter
Houston
neighborhoods

...In a way that respects the diverse cultures, circumstances and needs of Houston's Neighborhoods



Create a “largest-ever” Volunteer Program that brands Recovery



Organized by
Neighborhood



Efficient



Leverage/assist
non-profits



~6 month
program



- **Millions of volunteer hours** targeted at high-need neighborhoods
- Ensures CoH's FEMA "A" and "B" **10% match requirement fulfilled**
- Recovery Office working with FEMA to expand match-eligible programs